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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,148	07/03/2003	Masami Iizuka	H6808.0019/P019	3315
24998	7590	10/20/2005	EXAMINER	
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP			STAFIRA, MICHAEL PATRICK	
2101 L Street, NW			ART UNIT	
Washington, DC 20037			PAPER NUMBER	
			2877	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/612,148	IIZUKA ET AL.	
	Examiner	Art Unit	
	Michael P. Stafira	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/3/2003</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims ~~1~~⁶ rejected under 35 U.S.C. 102(e) as being anticipated by Uto et al. ('737).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Claim 1

Uto et al. ('737) discloses a housing (Fig. 10, Ref. 100), wherein the housing accommodates a laser source (Fig. 1, Ref. 3), a beam polarization mechanism (Fig. 1, Ref. 10) having first (Fig. 1, Ref. 4) and second plane (See Fig. 12) mirrors enabling a beam emitted from the laser source (Fig. 1, Ref. 3) to be reflected so that the beam travels in the direction almost

Page 3

Page 3

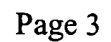
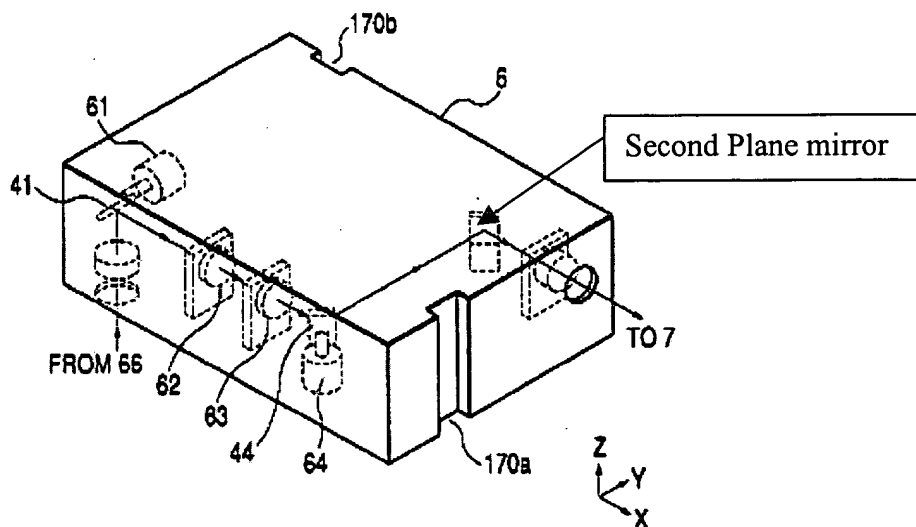


FIG. 12



Claim 2

Uto et al. ('737) further discloses the housing further accommodates a first beam splitter (Fig. 1, Ref. 9) for amplitude-splitting the parallel beam in the light passage from the beam expander (Fig. 1, Ref. 5) to the objective lens (Fig. 1, Ref. 11), a second beam splitter (Fig. 1, Ref. 28) for further dividing in two the parallel beam reflected by the first beam splitter (Fig. 1, Ref. 9), a beam profile observation camera (Fig. 1, Ref. 13) for observing the beam intensity profile of the cross-section of one of the divided parallel beams, a convergence lens (Fig. 1, Ref. 29) for converging the other divided parallel beam, and a beam spot positioning sensor (Fig. 1, Ref. 30) for detecting the position of a spot image converged with the convergence lens (Col. 5, lines 30-39), and the lighting optical machine further comprising display means (Fig. 1, Ref. 21)(Figs. 5a-5b), provided outside the housing, for displaying output signals from either one of or both the beam profile observation camera and beam spot positioning sensor (See Figs. 5a-5b).

Claim 3

Uto et al. ('737) discloses a housing (Fig. 10, Ref. 100), wherein the housing accommodates a laser source (Fig. 1, Ref. 3), a beam polarization mechanism (Fig. 1, Ref. 10) having first (Fig. 1, Ref. 4) and second plane mirrors (See Fig. 12) enabling a beam emitted from the laser source to be reflected so that the beam travels in the direction almost parallel to the beam emitted from the laser source (See Fig. 1), a beam expander (Fig. 1, Ref. 5) for converting the beam to a parallel beam having a larger cross-sectional area, an objective lens (Fig. 1, Ref. 11), through which the parallel beam is reduced and applied to the surface of a sample (Fig. 1, Ref. 1), a first beam splitter (Fig. 1, Ref. 9) for amplitude-splitting the parallel beam in the light passage from beam expander (Fig. 1, Ref. 5) to the objective lens (Fig. 1, Ref. 11), a second beam splitter (Fig. 1, Ref. 28) for further dividing in two the parallel beam reflected by the first beam splitter (Fig. 1, Ref. 9), a beam profile observation camera (Fig. 1, Ref. 13) for observing the beam intensity profile of the cross-section of a first parallel beam, one of the divided beams, a convergence lens (Col. 17, lines 65-67) for converging a second parallel beam, the other of the divided beams, and a beam spot positioning sensor (Fig. 1, Ref. 30) for detecting the position of a spot image converged with the convergence lens (Fig. 1, Ref. 29); display means (Fig. 1, Ref. 21)(Figs. 5a-5b) for displaying output signals of either one of or both the beam profile observation camera and beam spot positioning sensor; a first control mechanism (Fig. 12, Ref. 61, 64) for controlling the directions of the two plane mirrors of the beam polarization mechanism with an electric signal (Col. 9, 11-22); a second control mechanism (Fig. 1, Ref. 300) for controlling the focus position of the beam expander (Fig. 1, Ref. 5) with an electric signal (Col.6, lines 29-45); an optical image observation mechanism (Fig. 1, Ref. 12) for forming an

Art Unit: 2877

enlarged image of the sample irradiated with the second parallel beam; and an image comparison mechanism (Fig. 1, Ref. 17) for comparing images of two areas on the sample obtained by the optical image observation mechanism to detect a defect (Col. 7, lines 1-25).

Claim 4

Uto et al. ('737) further discloses a housing (Fig. 10, Ref. 100), wherein the housing accommodates a laser source (Fig. 1, Ref. 3), a first plane mirror (Fig. 1, Ref. 4) for reflecting a beam emitted from the laser source (Fig. 1, Ref. 3) to the direction approximately perpendicular to the traveling direction of the beam, a second plane mirror (See Fig. 12) for reflecting again the beam reflected by the first plane mirror to the direction approximately perpendicular to the traveling direction of the reflected beam to generate the beam traveling in the direction approximately parallel to the beam emitted from the laser source (See Fig. 1), a beam expander (Fig. 1, Ref. 5) for converting the beam to a parallel beam having a larger cross-sectional area, and an objective lens (Fig. 1, Ref. 11), through which the parallel beam is reduced and applied to the surface of a sample (fig. 1, Ref. 1); a first control mechanism (Fig. 12, Ref. 61, 64) for controlling the directions of the first and second plane mirrors of the beam polarization mechanism with an electric signal (Col. 9, lines 11-22); and a second control mechanism (Fig. 1, Ref. 300) for controlling the focus position of the beam expander with an electric signal (Col. 6, lines 29-45).

Claim 5

Uto et al. ('737) further discloses wherein the housing further accommodates a first beam splitter (Fig. 1, Ref. 9) for amplitude-splitting the parallel beam in the light passage from the beam expander (Fig. 1, Ref. 5) to the objective lens (Fig. 1, Ref. 11), a second beam splitter (Fig.

Art Unit: 2877

1, Ref. 28) for further dividing in two the parallel beam reflected by the first beam splitter (Fig. 1, Ref. 9), a beam profile observation camera (Fig. 1, Ref. 13) for observing the beam intensity profile of the cross-section of one parallel beam of the divided beams, a lens for converging the (Col. 17, lines 58-67) other parallel beam of the divided beams, and a beam spot positioning sensor (Fig. 1, Ref. 30) for detecting the position of a spot image converged with the lens, the lighting optical machine further comprising display means (Fig. 1, Ref. 21) for displaying output signals of either one of or both the beam profile observation camera and beam spot positioning sensor (See Fig. 5a-5b).

Claim 6

Uto et al. ('737) further discloses a housing (Fig. 10, Ref. 100), wherein the housing accommodates a laser source (Fig. 1, Ref. 3), a first plane mirror (Fig. 1, Ref. 4) for reflecting a beam emitted from the laser source to the direction approximately perpendicular to the traveling direction of the beam, a second plane mirror (See Fig. 12) for reflecting again the beam reflected by the first plane mirror to the direction approximately perpendicular to the traveling direction of the reflected beam to generate the beam traveling in the direction approximately parallel to the beam emitted from the laser source (See Fig. 1), a beam expander (Fig. 1, Ref. 5) for converting the beam to a parallel beam having a larger cross-section area, an objective lens (Fig. 1, Ref. 11), through which the parallel beam is reduced and applied to the surface of a sample (Fig. 1, Ref. 1), a first beam splitter (Fig. 1, Ref. 9) for amplitude-splitting the parallel beam in the light passage from the beam expander (Fig. 1, Ref. 5) to the objective lens (Fig. 1, Ref. 11), a second beam splitter (Fig. 1, Ref. 28) for further dividing in two the parallel beam reflected by the first beam splitter (Fig. 1, Ref. 9), a beam profile observation camera (Fig. 1, Ref. 13) for observing

Art Unit: 2877

the beam intensity profile of the cross-section of a first parallel beam, one of the divided beams, a convergence lens (Col. 17, lines 65-67) for converging a second parallel beam, the other of the divided beams, and a beam spot positioning sensor (Fig. 1, Ref. 30) for detecting the position of a spot image converged with the convergence lens; display means (Fig. 1, Ref. 21) for displaying output signals of either one of or both the beam profile observation camera and beam spot positioning sensor (See Fig. 5a-5b); a first control mechanism (Fig. 12, Ref. 61, 64) for controlling the directions of the two plane mirrors of the beam polarization mechanism with an electric signal (Col. 9, 11-22); a second control mechanism (Fig. 1, Ref. 300) for controlling the focus position of the beam expander with an electric signal (Col. 6, lines 29-45); an optical image observation mechanism (Fig. 1, Ref. 29) for forming an enlarged image of the sample irradiated with the second parallel beam; and an image comparison mechanism for comparing images of two areas on the sample obtained by the optical image observation mechanism to detect a defect (Col. 7, lines 1-25).

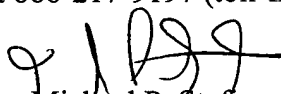
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Stafira whose telephone number is 571-272-2430.

The examiner can normally be reached on 4/10 Schedule Mon.-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Toatley can be reached on 571-272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2877

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael R. Stafira
Primary Examiner
Art Unit 2877

October 14, 2005